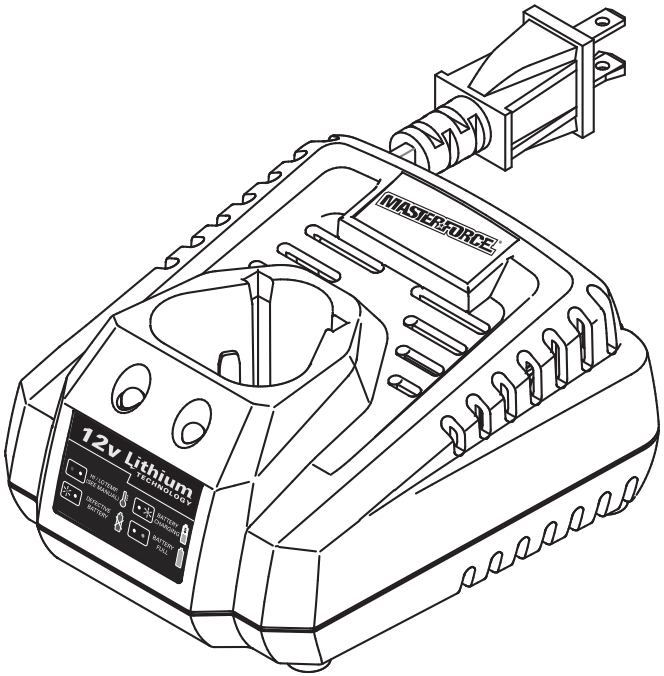
12 Volt Lithium-Ion Battery Charger



252-8020

OPERATOR'S MANUAL

⚠ CAUTION: To Reduce The Risk Of Injury, User Must Read And Understand The Operator's Manual. Save These Instructions For Future Reference.

For questions / comments, technical assistance or repair parts – Please Call Toll Free: 1-866-917-4374. (M-F 8am – 6pm EST.)

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SAFETY SYMBOLS

Some of these following symbols may be used on this tool. Please study them and learn their meaning. Proper interpretation of these symbols will allow you to operate the tool better and more safely.

Symbol	Name	Designation / Explanation
V	Volts	Voltage
A	Amperes	Current
Hz	Hertz	Frequency (cycles per second)
W	Watts	Power
∿	Alternating current	Type of current
⎓	Direct current	Type of characteristic of current
n_o	No-load speed	Rotational speed at no load
⧈	Class II construction	Double insulated construction
.../min	Per minute	Revolutions, strokes, surface speed orbits, etc., per minute
	Wear safety goggles	**⚠ WARNING: The operation of any power tool can result in foreign objects being thrown into your eyes, which can result in severe eye damage. Before beginning power tool operation, always wear safety goggles or safety glasses with side shields and a full-face shield when needed. We recommend a Wide Vision Safety Mask for use over eye-glasses or standard safety glasses with side shields. Always use eye protection which is marked to comply with ANSI Z87.1.**

⚠ WARNING: To ensure safety and reliability, all repairs should be performed by a qualified service technician.

SAFETY INSTRUCTIONS

The purpose of safety symbols is to attract your attention to possible dangers. The safety symbols and the explanations with them deserve your careful attention and understanding. The symbol warnings do not, by themselves, eliminate any danger. The instructions and warnings they give are no substitutes for proper accident prevention measures.

⚠ WARNING: Be sure to read and understand all safety instructions in this manual, including all safety alert symbols such as "DANGER," "WARNING," and "CAUTION" before using this power source. Failure to following all instructions listed below may result in electric shock, fire, and/or serious personal injury.

SYMBOL MEANING

SAFETY ALERT SYMBOL: Indicates DANGER, WARNING, OR CAUTION.
May be used in conjunction with other symbols or pictographs.

⚠ DANGER: Indicates an imminently hazardous situation, which, if not avoided, will result in death or serious injury.

⚠ WARNING: Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury.

⚠ CAUTION: Indicates a potentially hazardous situation, which, if not avoided, could result in minor or moderate injury.

NOTICE: (Without Safety Alert Symbol) Indicates a situation that may result in property damage.

SAVE THESE INSTRUCTIONS!

SAFETY INSTRUCTIONS

⚠ WARNING: For Indoor use only.

⚠ WARNING: Dry location use only.

⚠ WARNING: Risk of fire and electric shock.

⚠ WARNING: Risk of injury.

⚠ WARNING: Charge only 252-8016, 252-8017 rechargeable battery pack. Other types of battery pack may burst, causing injury and damage.

GENERAL SAFETY RULES

⚠ WARNING: Read all safety warnings and instructions. Failure to follow the warnings and instructions may result in electric shock, fire and/or serious injury.

Save all warnings and instructions for future reference.

The term power tool in the warnings refers to your mains-operated (corded) power tool or battery-operated (cordless) power tool.

WORK AREA SAFETY

1. **Keep the work area clean and well lit.** Cluttered or dark areas invite accidents.
2. **Do not operate power tools in explosive atmospheres, such as in the presence of flammable liquids, gases or dust.** Power tools create sparks which may ignite the dust or fumes.
3. **Keep children and bystanders away while operating a power tool.** Distractions can cause you to lose control.

ELECTRICAL SAFETY

1. **Power tool plugs must match the outlet. Never modify the plug in any way.** Do not use any adapter plugs with earthed (grounded) power tools. Unmodified plugs and matching outlets will reduce risk of electric shock.
2. **Avoid body contact with earthed or grounded surfaces such as pipes, radiators, ranges and refrigerators.** There is an increased risk of electric shock if your body is earthed or grounded.
3. **Do not expose power tools to rain or wet conditions.** Water entering a power tool will increase the risk of electric shock.
4. **Do not abuse the cord.** Never use the cord for carrying, pulling or unplugging the power tool. Keep cord away from heat, oil, sharp edges or moving parts. Damaged or entangled cords increase the risk of electric shock.
5. **When operating a power tool outdoors, use an extension cord suitable for outdoor use.** Use of a cord suitable for outdoor use reduces the risk of electric shock.
6. **If operating a power tool in a damp location is unavoidable, use a ground-fault circuit interrupter (GFCI) protected supply.** Use of a GFCI reduces the risk of electric shock.

SERVICE

1. **Have your power tool serviced by a qualified repair person using only identical replacement parts.** This will ensure that the safety of the power tool is maintained.

SAFETY INSTRUCTIONS

SAFETY RULES FOR CHARGER

⚠ WARNING: Read and understand all instructions. Failure to follow all instructions listed below may result in electric shock, fire, and/or serious personal injury.

1. **Before using the battery charger, read all instructions and cautionary markings in this manual and on the battery charger, the battery, and the product using the battery to prevent misuse of the products and possible injury or damage.**

⚠ CAUTION: To reduce the risk of electric shock or damage to the charger and battery, charge only those rechargeable batteries specifically designated on your charger's label. Other types of batteries may burst, causing personal injury or damage.

2. **Do not use the charger outdoors or expose it to wet or damp conditions.** Water entering the charger will increase the risk of electric shock.

3. **Use of an attachment not recommended or sold by the battery-charger manufacturer may result in a risk of fire, electric shock or injury to persons.**

4. **Do not abuse the cord or charger.** Never use the cord to carry the charger. Do not pull the charger cord to disconnect the plug from the receptacle. Damage to the cord or charger could occur and create an electric shock hazard. Replace damaged cords immediately.

5. **Make sure that the cord is located so that it will not be stepped on, tripped over, come in contact with sharp edges or moving parts, or otherwise subjected to damage or stress.** This will reduce the risk of accidental falls, which could cause injury and damage to the cord, and could then result in electric shock.

6. **Keep the cord and charger from heat to prevent damage to the housing or internal parts.**

7. **Do not allow gasoline, oils, petroleum-based products, etc. to come in contact with plastic parts.** These materials contain chemicals that can damage, weaken, or destroy plastic.

8. **An extension cord should not be used unless absolutely necessary.** Use of an improper extension cord could result in a risk of fire and electric shock.

If an extension cord must be used, make sure that:

- The pins on plug of extension cord are the same number, size and shape as those of the plug on charger.
- The cord is properly wired and in good electrical condition.
- The size is large enough for AC ampere rating of charger as specified below:

The Cord Length (Feet)	25'	50'	100'
Cord Size (AWG)	16	16	16

NOTICE: AWG = American Wire Gauge

9. **Do not operate the charger with a damaged cord or plug, which could cause shorting and electric shock.** If damaged, have the charger repaired or replaced by a qualified service technician.

10. **Do not operate the charger if it has received a sharp blow, been dropped, or has otherwise been damaged in any way.** Take it to a qualified service technician for an electrical check to determine if the charger is in good working order.

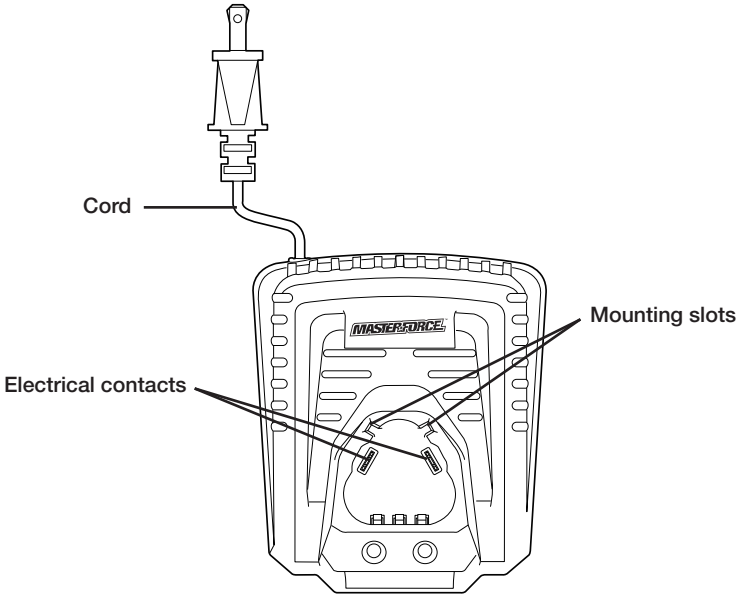
11. **Do not disassemble the charger.** Take it to a qualified service technician when service or repair is required. Incorrect reassembly may result in a risk of electric shock or fire.

12. **Unplug the charger from the electrical outlet before attempting any maintenance or cleaning to reduce the risk of electric shock.**

SAFETY INSTRUCTIONS

13. **Disconnect the charger from the power supply when not in use.** This will reduce the risk of electric shock or damage to the charger if metal items should fall into the opening. It will also help prevent damage to the charger during a power surge.
14. **Risk of electric shock.** Do not touch the uninsulated portion of the output connector or uninsulated battery terminal.
15. **Save these instructions.** Refer to them frequently and use them to instruct others who may use this tool. If you lend this tool to someone else, also lend these instructions to them to prevent misuse of the product and possible injury.

OVERVIEW



SPECIFICATIONS

Charger input	120-Volts, 60Hz AC only	
Charging adaptor output	12 V	
Charging Time For Batteries	30 minutes	12V 1.3Ah Li-Ion (252-8016)
		12V 1.5Ah Li-Ion (252-8017)
Charger weight	9 oz.	
Optimum charging temperature	50°F (10°C) –104°F (40°C)	

ASSEMBLY

⚠ WARNING: If any part is broken or missing, do not attempt to plug in the power cord or operate the charger until the broken or missing part is replaced. Failure to do so could result in possible serious injury.

⚠ WARNING: Do not attempt to modify this charger or create accessories not recommended for use with this charger. Any such alteration or modification is misuse and could result in a hazardous condition leading to possible serious injury.

UNPACKING

This product has been shipped completely assembled.

1. Carefully remove the charger and any accessories from the box. Make sure that all items listed in the packing list are included.
2. Inspect the charger carefully to make sure no breakage or damage occurred during shipping.
3. Do not discard the packing material until you have carefully inspected and satisfactorily operated the charger.

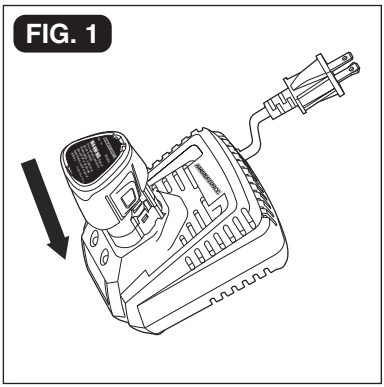
CONTENTS

Charger, operator's manual

OPERATION

HOW TO CHARGE THE BATTERY PACK (FIG. 1)

FIG. 1



NOTICE: The Lithium-Ion battery pack is shipped partially charged. Before using it the first time, fully charge the battery pack.

A fully discharged battery pack will charge in about 30 minutes in a surrounding temperature between 50°F (10°C) and 104°F (40°C).

1. Charge the Lithium-Ion battery pack with the correct charger.
2. Connect the charger to a power supply.
3. Align the raised ribs of the battery pack with the slot in the charger.
4. Insert the battery pack into the charger.
5. The charger will communicate with the battery pack to evaluate the condition of the battery pack.
6. The green light will flash while the battery pack is charging. After charging is complete, the green LED on the charger will be on. The flickering red light indicates a defective battery or a bad connection between the battery and the charger.
7. The battery pack will fully charge, but will not overcharge, if left on the charger.

NOTICE: For your convenience, the charger can operate with most generators and inverters rated at 300 watts or higher.

OPERATION

LED FUNCTIONS OF CHARGER (FIG. 2)

FIG. 2

LED INDICATOR	BATTERY PACK	RED LED	GREEN LED	ACTION
	Hot/Cold battery	On	Off	Fast charge will begin when battery returns to 50°F (10°C) and 104°F (40°C)
	Defective	Flashing	Off	Battery pack or charger is defective
	Charging	Off	Flashing	Charging
	Fully charged	Off	On	Charging is complete

CHARGING A HOT BATTERY PACK

If the battery pack is above normal temperature range, the red LED of the charger will illuminate and the green LED will be off. When the battery pack cools down to approximately 104°F (40°C), the charger will automatically begin charging.

CHARGING A COLD BATTERY PACK

If the battery pack is below the normal temperature range, the red LED will illuminate and the green LED will be off. When the battery warms to a temperature of more than 50°F (10°C), the charger will automatically begin charging.

DEFECTIVE BATTERY

If the charger detects a problem, the red LED will begin flashing and the green LED will be off.

1. If registering as defective, remove and reinsert the battery pack in the charger. If the LED status reads “defective” a second time, try to charge a different battery pack.
2. If a different battery pack charges normally, dispose of the defective battery pack (see Maintenance section).
3. If a different battery pack also indicates “defective,” the charger may be defective.

BATTERY CHARGING

If the battery pack is being charged within a normal surrounding temperature range (50°F to 104°F), the green LED will begin flashing and the red LED will be off.

OPERATION

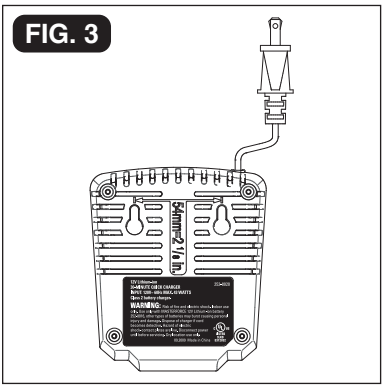
BATTERY FULL

When the battery is fully charged, the green LED Light on the charger will be on and the red LED light will be off.

NOTICE: The battery pack will fully charge, but will not overcharge, if left on the charger.

NOTICE: Charger may warm with several continuous charge cycles. This is part of the normal operation of the charge. Charge in a well ventilated area.

WALL-MOUNT HOLES (FIG. 3)



The charger has hanging holes for convenient storage. Install screws in the wall 2-1/8 inches apart.

Use screws sufficiently strong to hold the combined weight of the charger and battery pack (approximately 1 lb. 3 oz.).

MAINTENANCE

⚠ WARNING: When servicing, use only identical replacement parts. Use of any other parts may create a hazard or cause product damage.

⚠ WARNING: Always wear safety goggles or safety glasses with side shields when using compressed air to clean tool. If the operation is dusty, also wear a dust mask.

⚠ WARNING: To avoid serious personal injury, always remove the battery pack from the tool when cleaning or performing any maintenance.

GENERAL MAINTENANCE

Avoid using solvents when cleaning plastic parts. Most plastics are susceptible to damage from various types of commercial solvents and may be damaged by their use. Use clean cloths to remove dirt, dust, oil, grease, etc.

⚠ WARNING: Do not at any time let brake fluid, gasoline, petroleum-based products, penetrating oils, etc. come in contact with plastic parts. Chemicals can damage, weaken or destroy plastic which may result in serious personal injury.

⚠ WARNING: When servicing, use only identical replacement parts. Use of any other parts may create a hazard or cause product damage. To ensure safety and reliability, all repairs should be performed by a qualified service technician.

TROUBLESHOOTING

PROBLEM	CAUSE	SOLUTION
The battery pack isn't charging.	The battery pack isn't connected to the charger.	Attach the battery pack to the charger.

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NOTES

12 VOLT LITHIUM-ION BATTERY CHARGER

WARRANTY

90-DAY MONEY BACK GUARANTEE:

This MASTERFORCE® brand power tool carries our 90-DAY Money Back Guarantee. If you are not completely satisfied with your MASTERFORCE® brand power tool for any reason within ninety (90) days from the date of purchase, return the tool with your original receipt to any MENARDS® retail store, and we will provide you a refund – no questions asked.

3-YEAR LIMITED WARRANTY:

This MASTERFORCE® brand power tool carries our famous No Hassle 3-Year Limited Warranty to the original purchaser. If, during normal use, this MASTERFORCE® power tool breaks or fails due to a defect in material or workmanship within three (3) years from the date of original purchase, simply bring this tool with the original sales receipt back to your nearest MENARDS® retail store. At its discretion, MASTERFORCE® agrees to have the tool or any defective part(s) repaired or replaced with the same or similar MASTERFORCE® product or part free of charge, within the stated warranty period, when returned by the original purchaser with original sales receipt. Not withstanding the foregoing, this limited warranty does not cover any damage that has resulted from abuse or misuse of the Merchandise. This warranty: (1) excludes expendable parts including but not limited to blades, brushes, belts, bits, light bulbs, and/or batteries; (2) shall be void if this tool is used for commercial and/or rental purposes; and (3) does not cover any losses, injuries to persons/property or costs. This warranty does give you specific legal rights and you may have other rights, which vary from state to state. Be careful, tools are dangerous if improperly used or maintained. Seller's employees are not qualified to advise you on the use of this Merchandise. Any oral representation(s) made will not be binding on seller or its employees. The rights under this limited warranty are to the original purchaser of the Merchandise and may not be transferred to any subsequent owner. This limited warranty is in lieu of all warranties, expressed or implied including warranties or merchantability and fitness for a particular purpose. Seller shall not be liable for any special, incidental, or consequential damages. The sole exclusive remedy against the seller will be for the replacement of any defects as provided herein, as long as the seller is willing or able to replace this product or is willing to refund the purchase price as provided above. For insurance purposes, seller is not allowed to demonstrate any of these power tools for you.

For questions / comments, technical assistance or repair parts – Please Call Toll Free at: **1-866-917-4374**. (M-F 8am – 6pm EST)

SAVE YOUR RECEIPTS
THIS WARRANTY IS VOID WITHOUT THEM

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09/2013